RANCHO SANTA ANA BOTANIC GARDEN
LEAFLETS
of
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Number 68 April 21, 1944

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FRAGARIA CALIFORNICA

CALIFORNIA WOOD STRAWBERRY

RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

Number 68 April 21, 1944

FRAGARIA CALIFORNICA
CALIFORNIA WOOD STRAWBERRY

Rosaceae Rose Family

Evergreen perennial usually less than 6 in. high, old stems clothed with brown leaf bases and bearing 6 or 8 living leaves. Plants spread by slender runners, often underground. Leaves 3-foliate with hairy petioles 2-6 in. long; stipules ½ in. long, persistent, membranous, pale green or reddish tinged, soon turning brown; leaflets thin, nearly sessile, central one largest, light green and sparsely pubescent above, lighter beneath and with copious hairs, cuneate-obovate, coarsely, serrately-toothed, conspicuously veined, 1-1½ in. long. Flowers white, about ⅝ in. across, 1-several in a cyme several inches long and with 1 or more leafy bracts at the forks. Calyx of 5, ovate, hairy sepals ¼ in. long, these alternate with the 5, narrower bracts. Petals 5, white, nearly orbicular, ¼ in. long. Stamens and pistils yellow; stamens about 20, filaments dilated, anthers minute, opening by a marginal slit. Receptacle convex bearing 50 or more pistils; after fertilization the receptacle enlarges to form the fleshy edible fruit known as a strawberry, the surface of which is dotted with the achenes. At maturity the fruit is rarely over ⅜ in. in diam., is usually sweet. Flowers March to June; fruits ripen from April to July.

The genus *Fragaria* (an ancient Latin name in reference to the fragrance of the fruits) consists of 8-40 variable and closely related species of the temperate regions of Europe and North and South America. California has 3 or 4 species of which the present and *F. chiloensis* are the most abundant. The latter inhabits the coastal bluffs and dunes from Alaska to San Luis Obispo Co., and also the coast of South America from Peru to Patagonia. The cultivated strawberries have been derived by crossing and selection of numerous wild species, but apparently *F. californica* was not utilized.

Fragaria californica (specific name meaning of california) was described in 1827 by von Chamisso (1781-1838) and von Schlechtendahl (1794-1866), German botanists. The former visited San Francisco in 1816 on a Russian voyage of exploration, and along with Eschscholtz (surgeon of the expedition, and for whom von Chamisso named the California Poppy, *Eschscholtzia*) collected the original specimens of *Fragaria californica* somewhere in the vicinity of San Francisco. This species is regarded as being most closely related to *F. vesca* and *mexicana*. The following are apparently best regarded as minor variants or synonyms of *F. californica*: *F. californica* variety *franciscana,* described by Rydberg in 1898, based upon specimens by Eastwood from Marin Co., Calif.; *F. crinita* described by Rydberg in 1898, based upon specimens collected by the Wilkes' Expedition in Washington; and *F. bracteata,* described by Heller in 1898, based upon specimens he had collected near Santa Fe, New Mexico in 1897.

Distribution of *F. californica* is extensive. It ranges from British

Columbia and Montana south to New Mexico, Arizona, California and Baja California. In California it is widely distributed. Along the coast of central and northern California it occurs at low elevations; in the Sierra Nevada in the Yellow Pine belt; and in southern California mainly at elevations of 4000 ft. or over. It is generally restricted to rather moist rich soils of the woodlands and to well-shaded situations. Oftentimes dead leaves, larger plants or other features of the forest floor tend to hide the plants, and unless one is particularly observant will walk through extensive areas of Wood Strawberries without noticing them. At high elevations the plants are covered with snow for long periods during the winter and are thoroughly dormant. Along the coast and elsewhere at low elevations the plants remain green throughout the winter and the old leaves do not die until the new ones are well out in the spring.

We have propagated *F. californica* since February, 1927, when three plants were collected on the City Creek road in the San Bernardino Mts. These were placed in a bed in the lathhouse where they increased rapidly and formed a beautiful green carpet consisting of hundreds of individual plants. During the next few years small lots of these plants were given to numerous individuals for propagation purposes. In 1936 two small colonies were established along the main trail in Madroño Cañon in the Garden, and comprised 95 plants. The locality was a steep north slope, largely of heavy adobe, but in places made up of gravel. These California Wood Strawberries were a success in this area almost immediately. Minor slides, trail cleaning and other more or less accidental transplantings resulted in the plants becoming scattered over a large part of Madroño Cañon, and the individuals now number a great many thousands. Unless they are prevented from doing so, they will eventually occupy all of suitable areas of this rather extensive north slope of the Garden. The only care they receive is an occasional sprinkling during the summer months, without which they might remain alive, but would probably not thrive.

Fragaria californica has not been used to any extent in California gardens, and will probably never take the place of *F. chiloensis* as a ground-cover (see Leaflet No. 56, April 2, 1943), since it can not be grown in full sun. However, as a delicate green ground-cover for shady banks, slopes or under trees the California Wood Strawberry has much to recommend it. Unlike *F. chiloensis* it does not become heavily matted and require frequent renovation. It also appears to be better able to withstand summer watering. Gardeners who are searching for a substitute for the common ground-covers that thrive in shade will find *F. californica* to be of merit.

CARL B. WOLF

RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general welfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

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